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## (54) PLASTIC OPTICAL ARTICLE WITH MULTILAYERED ANTIREFLECTION FILM

## (57)Abstract:

PROBLEM TO BE SOLVED: To provide a plastic film having a low reflectance in a wide visible light region and high electromagnetic wave shielding property and less liable to scratch and contamination.

SOLUTION: This plastic optical article has a scratch resistant hard coating layer of 1-15 $\mu$ m thickness and a four-layered antireflection film successively disposed on one face or both faces of the plastic film or sheet substrate. The antireflection film consists of a 1st layer based on ITO (In<sub>2</sub>O<sub>3</sub>-SnO<sub>2</sub> mixture), a 2nd layer based on SiO<sub>2</sub>, a 3rd layer based on ITO and a 4th layer based on SiO<sub>2</sub> from the hard coating layer side. The reflectance of the surface of the antireflection film is  $\leq 1\%$  in a visible light region of  $\geq 200$ nm wavelength.

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